Do Now:

To determine the distance between two points A and B on opposite sides of a swampy region, a surveyor chose a point C that is about 350 meters from point A and 400 meters from point B. If the m<ACB = 105°, find the distance between A and B.

Examples:

1. A triangular lot has sides that measure 215 units, 185 units, and 125 units.
   1. Determine the measure of the smallest angle of this lot.
   2. Find the area to the nearest square unit.
2. Two forces of 25 lbs and 15 lbs act on a body so that the angle between them is 75°. Find the magnitude of the resultant to the nearest pound.
3. The angles of elevation of a balloon from two points on a level ground are 24° and 47°. If the points are 8.5 miles apart and the balloon is between the points, in the same vertical plane, approximate, to the nearest tenth of a mile, the height of the balloon above the ground.